

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A purifier for use in a gas processing application comprising:

a chamber having a gas inlet and a gas outlet;

at least one baffle arranged in the chamber and having a coating comprising a getter material to react with species to be removed from a gas stream and form stable compounds[[],];

a source of the getter material within the chamber; and

means for ~~activating~~ vaporizing the source of the getter material to refresh the coating of getter material on the at least one baffle.

2. (Canceled)

3. (Currently Amended) The purifier according to Claim 21 further comprising a collector wherein the means for ~~activating~~ vaporizing the source of the getter material is arranged to produce an electric arc between the source of the getter material and the collector.

4. (Previously Presented) The purifier according to Claim 3 wherein the collector extends about the source of the getter material.

5. (Previously Presented) The purifier according to Claim 3 further comprising an inner wall of the chamber wherein the collector comprises at least part of the inner wall of the chamber.
6. (Previously Presented) The purifier according to Claim 1 wherein the source of the getter material comprises a rod, the at least one baffle being arranged about the rod.
7. (Previously Presented) The purifier according to Claim 6 wherein the rod extends longitudinally through the chamber.
8. (Previously Presented) The purifier according to Claim 7 wherein the rod is substantially co-axial with the chamber.
9. (Currently Amended) The purifier according to Claim 1 wherein the means for activating vaporizing the source of the getter material comprises a controller.
10. (Previously Presented) The purifier according to Claim 9 wherein the controller is adapted to activate at predefined time intervals.
11. (Currently Amended) The purifier according to Claim 10 further comprising a sensor for monitoring a process wherein the source of the getter material is activated vaporized when a predefined change in the process gas is detected by the sensor.

12. (Previously Presented) The purifier according to Claim 11 wherein the sensor is located within the chamber.

13. (Previously Presented) The purifier according to Claim 1 wherein the at least one baffle is adapted to create a convoluted path for gas flowing through the chamber.

14. (Previously Presented) The purifier according to Claim 1 wherein the getter material comprises at least one metal selected from the group of metals consisting of Ti, Ta and alloys thereof.

15. (Previously Presented) The purifier according to Claim 1 wherein the getter material comprises at least one metal selected from the group of metals consisting of Fe Cr and alloys thereof.

16. (Currently Amended) A semiconductor processing system comprising:

- a process chamber having a purified gas inlet; and

- a purifier comprising:

- a housing;

- a gas inlet;

- a gas outlet upstream of the purified gas inlet;

- at least one baffle arranged within the housing and comprising a getter material;

a source of the getter material; and

a means for applying an electric potential across the source of the getter material and the housing, thereby vaporizing the source of the getter material to refresh the coating of getter material on the at least one baffle.

17. (Previously Presented) The semiconductor processing system of claim 16 wherein the source of the getter material is a rod.

18. (Previously Presented) The semiconductor processing system of claim 16 wherein the source of the getter material is an electrode.

19. (Previously Presented) The semiconductor processing system of claim 16 wherein the at least one baffle is arranged to form a convoluted flow path.

20. (Previously Presented) The semiconductor processing system of claim 19 wherein at least one baffle is arranged about the source of the getter material.

21. (Previously Presented) The semiconductor processing system of claim 16 wherein the means for applying an electric potential comprises a power supply.

22. (Previously Presented) The semiconductor processing system of claim 16 wherein the means for applying an electric potential comprises a controller for activating the source of the getter material at predefined time intervals.

23. (Previously Presented) The semiconductor processing system of claim 16 wherein the getter material comprises at least one metal selected from the group of metals consisting of Ti, Ta, Zr, Fe, Cr and alloys thereof.